

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P159619

Luminaire Tested: **VST-E12-LED-E-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159619
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E12-LED-E-U-T3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (252) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33520.3 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

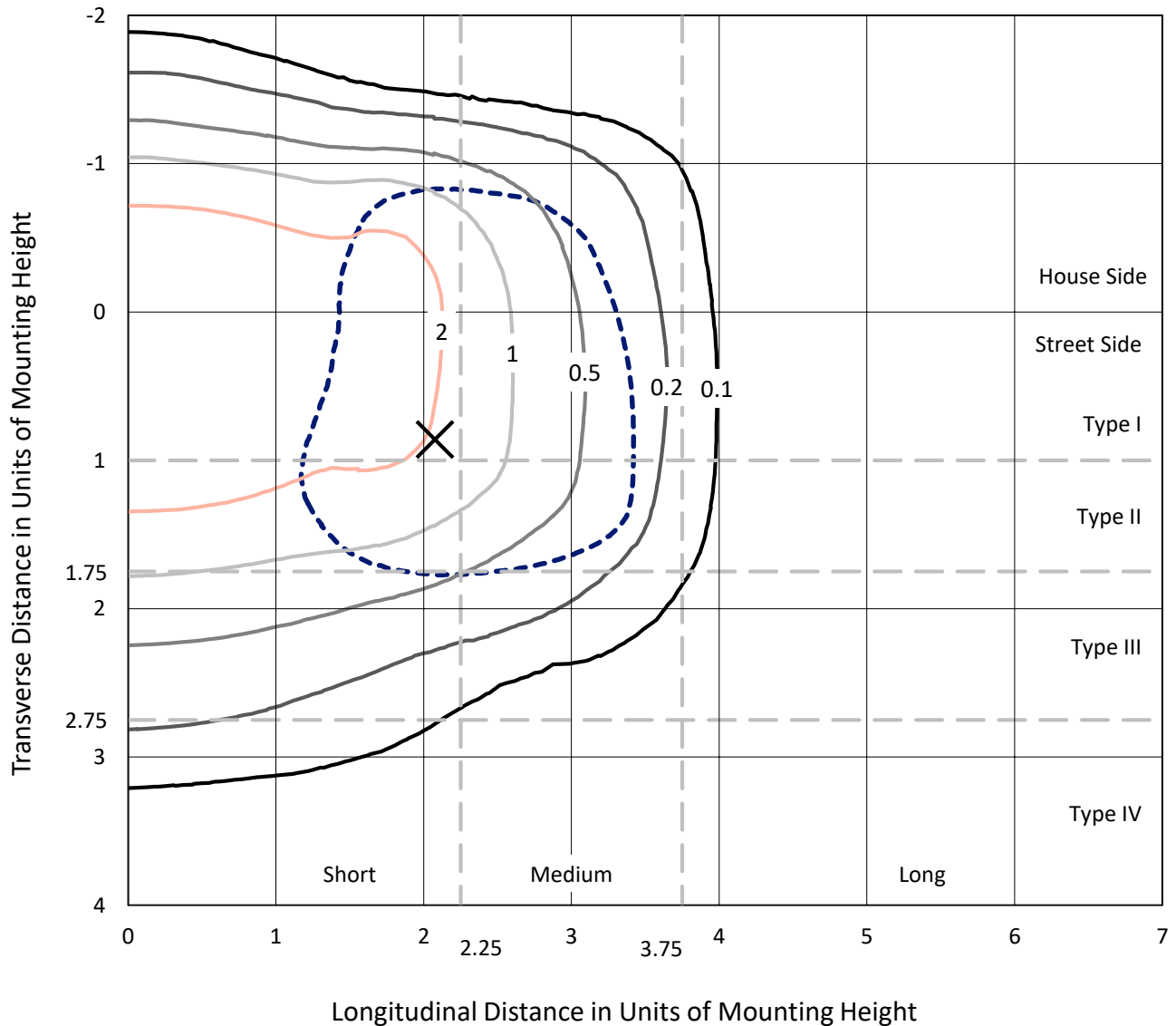
Input Watts (W): 291.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P159619
 CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

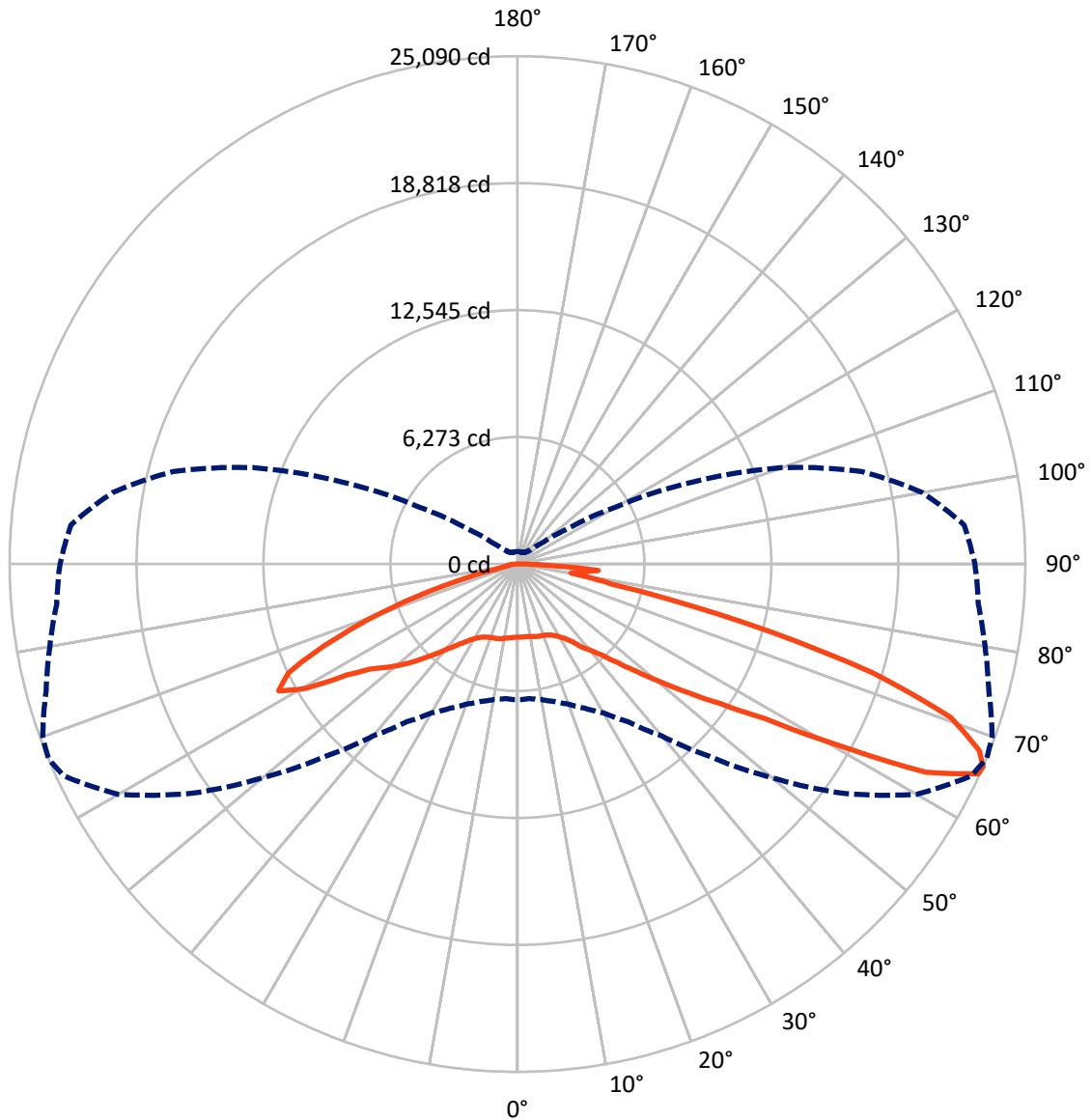


Based on 30 foot mounting height. Maximum calculated value = 4 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159619

CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P159619

CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

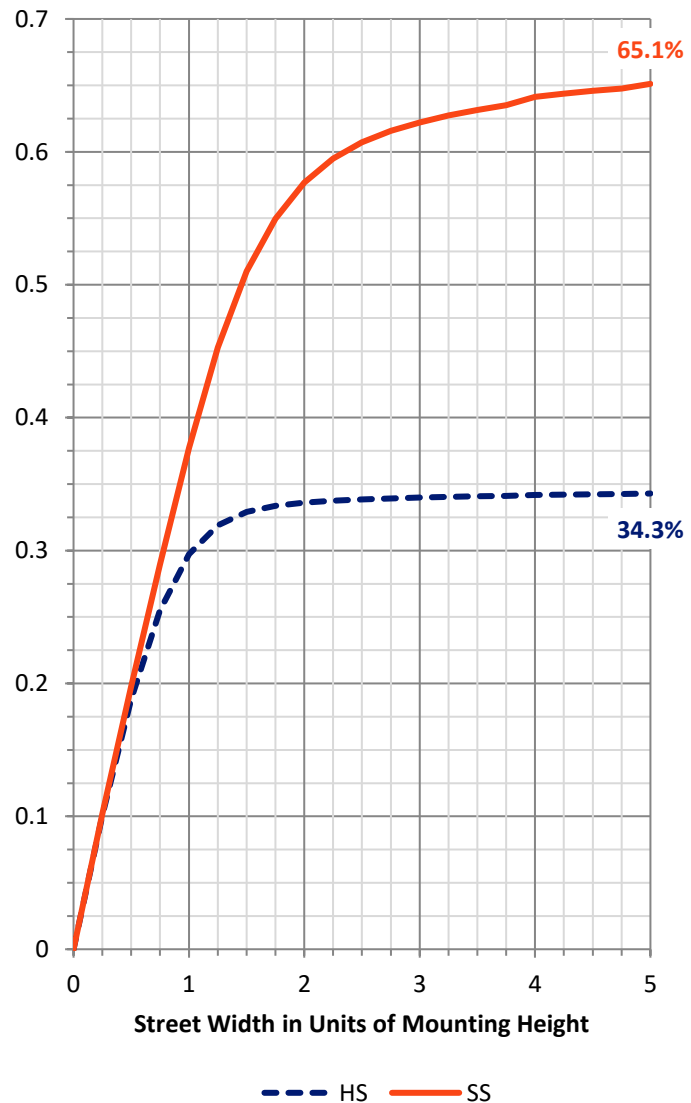
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11599.5	0.0	11599.5
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	21920.8	0.0	21920.8
	% Fixture	65.4	0.0	65.4
Total	Lumens	33520.3	0.0	33520.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.1	1.0
10°-20°	1027.7	3.1
20°-30°	1766.7	5.3
30°-40°	2855.3	8.5
40°-50°	4731.9	14.1
50°-60°	7426.2	22.2
60°-70°	10153.1	30.3
70°-80°	4464.9	13.3
80°-90°	747.3	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	33520.3	100.0
0°-180°	33520.3	100.0

Coefficient of Utilization



REPORT NUMBER: P159619

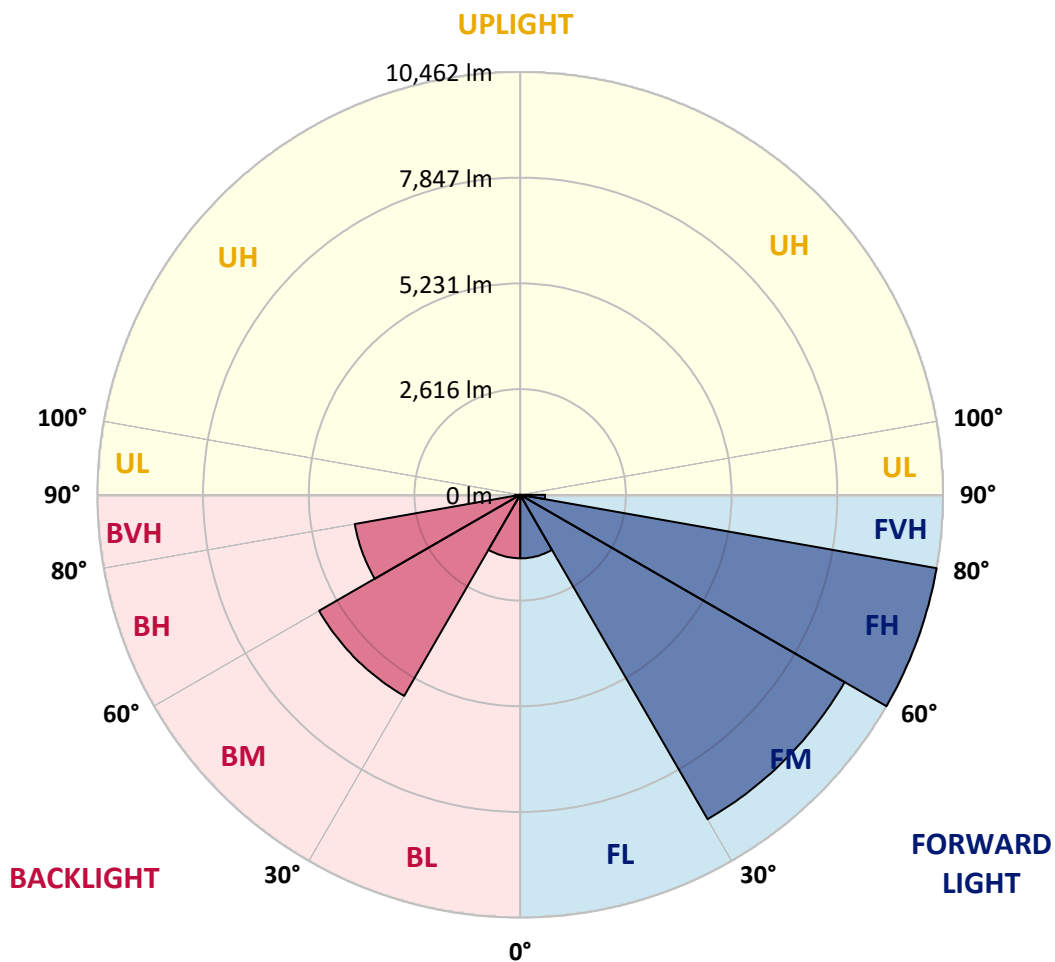
CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1572.4	4.7			
FM	(30°-60°)	9269.4	27.7			
FH	(60°-80°)	10462.4	31.2			G4/12000
FVH	(80°-90°)	616.6	1.8			G4/750
BL	(0°-30°)	1569.1	4.7	B3/2500		
BM	(30°-60°)	5744.0	17.1	B4/8500		
BH	(60°-80°)	4155.6	12.4	B4/5000		G4/5000
BVH	(80°-90°)	130.8	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P159619

CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9
2.5°	3610.3	3610.3	3612.5	3610.3	3610.3	3608.1	3616.9	3616.9	3616.9	3614.7	3621.3
5°	3601.5	3601.5	3603.7	3603.7	3605.9	3603.7	3610.3	3612.5	3612.5	3612.5	3619.1
7.5°	3579.6	3586.2	3581.8	3584.0	3586.2	3592.8	3601.5	3605.9	3610.3	3616.9	3619.1
10°	3533.6	3544.5	3542.3	3548.9	3551.1	3570.8	3577.4	3586.2	3601.5	3610.3	3616.9
12.5°	3470.0	3476.6	3478.8	3487.5	3496.3	3520.4	3538.0	3553.3	3575.2	3597.1	3619.1
15°	3419.6	3424.0	3424.0	3432.7	3445.9	3467.8	3489.7	3516.0	3548.9	3586.2	3621.3
17.5°	3434.9	3445.9	3437.1	3434.9	3439.3	3452.5	3472.2	3494.1	3533.6	3575.2	3616.9
20°	3535.8	3538.0	3533.6	3522.6	3513.8	3516.0	3516.0	3520.4	3544.5	3577.4	3610.3
22.5°	3619.1	3627.8	3625.6	3627.8	3625.6	3634.4	3630.0	3621.3	3612.5	3614.7	3630.0
25°	3691.4	3700.2	3700.2	3706.7	3717.7	3735.2	3748.4	3746.2	3733.0	3715.5	3708.9
27.5°	3809.8	3809.8	3809.8	3816.3	3831.7	3853.6	3875.5	3888.7	3899.6	3882.1	3844.8
30°	3996.1	3998.3	3991.7	3993.9	4004.9	4033.4	4059.7	4079.4	4101.3	4099.1	4050.9
32.5°	4200.0	4208.7	4206.5	4215.3	4230.6	4256.9	4285.4	4316.1	4344.6	4362.2	4331.5
35°	4463.0	4471.8	4474.0	4487.1	4504.6	4544.1	4583.6	4623.0	4653.7	4666.9	4660.3
37.5°	4894.8	4897.0	4888.3	4868.5	4875.1	4905.8	4951.8	5015.4	5035.1	5048.3	5079.0
40°	5541.5	5534.9	5499.8	5482.3	5471.3	5484.5	5475.7	5526.1	5572.2	5574.4	5572.2
42.5°	6326.2	6306.5	6273.6	6269.2	6264.9	6260.5	6236.4	6238.5	6280.2	6291.2	6278.0
45°	7106.6	7082.5	7058.4	7080.3	7054.0	7121.9	7141.7	7194.3	7200.9	7222.8	7189.9
47.5°	7746.7	7748.9	7748.9	7779.6	7832.2	7961.5	8077.7	8178.5	8215.8	8268.4	8275.0
50°	8231.1	8244.3	8285.9	8384.6	8496.4	8713.4	8908.5	9090.4	9254.8	9316.2	9478.4
52.5°	8513.9	8549.0	8636.6	8801.0	9000.5	9281.1	9588.0	9897.1	10182.0	10423.2	10616.1
55°	8463.5	8489.8	8643.2	8899.7	9211.0	9588.0	10017.6	10464.8	10909.8	11317.5	11633.2
57.5°	8139.0	8156.6	8310.0	8599.4	8987.4	9493.7	10100.9	10765.1	11389.8	12047.5	12586.7
60°	7713.8	7740.1	7882.6	8110.6	8516.1	9055.3	9759.0	10659.9	11657.3	12691.9	13700.3
62.5°	7442.0	7435.4	7560.3	7764.2	8068.9	8557.7	9235.1	10302.6	11683.6	13432.8	15425.4
65°	6990.4	6970.7	7100.0	7332.4	7663.4	8136.9	8779.1	9805.0	11407.4	13713.4	16538.9
66°	6709.8	6670.4	6799.7	7034.3	7365.3	7869.4	8485.4	9498.1	11072.0	13439.4	16420.6
67.5°	6218.8	6199.1	6260.5	6444.6	6690.1	7163.6	7805.9	8825.2	10278.5	12615.2	15552.5
70°	5054.8	5011.0	5059.2	5142.5	5236.8	5353.0	5747.5	6556.4	7786.1	10050.5	12529.7
72.5°	3443.7	3421.8	3511.6	3638.8	3890.9	4009.2	4164.9	4296.4	4730.4	6335.0	8739.7
75°	2619.5	2632.6	2746.6	2957.1	3281.5	3632.2	3974.2	4099.1	3954.4	3829.5	4960.6
77.5°	1468.7	1545.4	1683.5	1950.9	2295.1	2790.5	3386.7	4044.3	4373.1	4292.0	4013.6
80°	605.0	594.0	662.0	808.9	927.2	1332.8	2038.6	2862.8	3787.8	4373.1	4281.1
82.5°	168.8	173.2	223.6	287.2	370.5	471.3	736.5	1183.7	1929.0	3000.9	3928.1
85°	52.6	52.6	72.3	107.4	127.1	146.9	186.3	306.9	523.9	1045.6	2119.7
87.5°	11.0	11.0	15.3	30.7	32.9	32.9	41.6	57.0	50.4	46.0	206.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159619

CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9
2.5°	3614.7	3610.3	3612.5	3614.7	3612.5	3612.5	3610.3	3608.1	3610.3	3610.3	3616.9
5°	3612.5	3610.3	3612.5	3612.5	3612.5	3614.7	3614.7	3614.7	3621.3	3621.3	3632.2
7.5°	3616.9	3616.9	3621.3	3621.3	3621.3	3621.3	3623.4	3627.8	3638.8	3636.6	3656.3
10°	3625.6	3630.0	3641.0	3643.2	3643.2	3649.7	3654.1	3662.9	3673.9	3678.2	3695.8
12.5°	3636.6	3658.5	3678.2	3682.6	3689.2	3700.2	3706.7	3711.1	3730.9	3737.4	3759.4
15°	3649.7	3680.4	3704.5	3713.3	3722.1	3735.2	3744.0	3750.6	3768.1	3776.9	3803.2
17.5°	3651.9	3687.0	3715.5	3728.7	3739.6	3755.0	3768.1	3781.3	3801.0	3814.2	3840.5
20°	3649.7	3695.8	3739.6	3757.2	3768.1	3796.6	3816.3	3833.9	3858.0	3871.1	3897.4
22.5°	3673.9	3726.5	3785.7	3807.6	3825.1	3864.6	3890.9	3919.4	3950.1	3958.8	3978.6
25°	3730.9	3785.7	3860.2	3890.9	3921.6	3974.2	4011.4	4053.1	4083.8	4088.2	4094.7
27.5°	3827.3	3877.7	3967.6	4013.6	4064.0	4138.6	4193.4	4235.0	4278.9	4278.9	4274.5
30°	4022.4	4033.4	4127.6	4186.8	4261.3	4370.9	4452.0	4498.1	4530.9	4530.9	4493.7
32.5°	4274.5	4261.3	4346.8	4410.4	4513.4	4666.9	4776.5	4811.5	4846.6	4835.6	4772.1
35°	4638.4	4601.1	4649.3	4745.8	4861.9	5072.4	5186.4	5265.3	5287.2	5256.5	5155.7
37.5°	5096.5	5092.1	5116.2	5223.6	5353.0	5624.8	5741.0	5791.4	5773.8	5719.0	5541.5
40°	5580.9	5567.8	5552.4	5624.8	5769.5	6096.1	6302.1	6328.4	6304.3	6223.2	5999.6
42.5°	6227.6	6227.6	6155.3	6175.0	6295.5	6661.6	6904.9	6988.2	6990.4	6872.0	6573.9
45°	7117.6	7108.8	6981.6	6951.0	7043.0	7402.5	7716.0	7762.0	7762.0	7606.4	7279.8
47.5°	8187.3	8176.3	8051.4	7944.0	7961.5	8349.5	8610.3	8680.5	8619.1	8502.9	8114.9
50°	9392.9	9373.2	9246.0	9145.2	9101.4	9493.7	9715.1	9748.0	9658.1	9520.0	9099.2
52.5°	10616.1	10675.2	10600.7	10545.9	10561.3	10815.5	11043.5	10887.9	10841.8	10692.8	10269.7
55°	11889.6	12071.6	12236.0	12187.7	12244.7	12492.4	12536.3	12330.2	12246.9	12139.5	11668.2
57.5°	13172.0	13702.4	14241.7	14392.9	14533.2	14888.3	14837.9	14500.4	14563.9	14723.9	14193.5
60°	14962.9	16495.1	17862.9	18115.0	18551.2	18853.7	18921.7	18855.9	19151.9	19068.6	18599.5
62.5°	17713.9	20267.6	22170.3	22643.8	23082.2	23066.8	22836.7	22599.9	22891.5	22891.5	21666.1
65°	19678.0	22575.8	24612.2	25004.6	24987.1	24458.8	23915.2	23441.7	23400.0	23075.6	21284.7
66°	19770.0	22753.4	24748.1	25090.1	24958.6	24108.1	23457.0	22856.4	22599.9	22148.4	20313.6
67.5°	18941.4	22251.4	24305.3	24603.5	24257.1	23038.3	22141.8	21337.3	20964.7	20204.0	18476.7
70°	15537.2	19123.4	22111.1	22720.5	22328.1	20784.9	19557.4	18470.1	17757.7	16659.5	15414.4
72.5°	11341.6	14118.9	17354.4	18345.2	18283.8	16863.4	15874.8	14879.6	13943.6	12944.0	12034.3
75°	7371.8	9184.7	10988.7	11567.4	11289.0	10467.0	9759.0	9178.1	8290.3	7595.4	7426.6
77.5°	4208.7	5142.5	4864.1	4791.8	4443.3	3586.2	2384.9	1672.5	1510.3	1885.2	2067.1
80°	4004.9	3630.0	2972.4	2680.9	2463.9	1679.1	881.2	620.3	543.6	556.8	598.4
82.5°	4515.6	4706.3	3849.2	3215.7	2799.2	2043.0	1115.7	519.5	379.2	449.4	504.2
85°	3384.5	4765.5	4723.8	4002.7	3283.7	2354.3	1319.6	396.8	228.0	315.7	412.1
87.5°	686.1	1128.9	1087.3	955.7	813.2	567.7	221.4	124.9	114.0	155.6	236.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159619

CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9	3616.9
2.5°	3621.3	3621.3	3625.6	3632.2	3634.4	3634.4	3638.8	3634.4	3643.2	3645.4	3647.6
5°	3641.0	3647.6	3651.9	3662.9	3669.5	3673.9	3680.4	3676.1	3684.8	3687.0	3691.4
7.5°	3662.9	3673.9	3682.6	3687.0	3695.8	3695.8	3698.0	3693.6	3691.4	3684.8	3682.6
10°	3702.4	3708.9	3719.9	3715.5	3711.1	3695.8	3682.6	3662.9	3651.9	3632.2	3621.3
12.5°	3765.9	3770.3	3770.3	3750.6	3722.1	3687.0	3654.1	3621.3	3594.9	3573.0	3559.9
15°	3809.8	3818.5	3807.6	3779.1	3737.4	3689.2	3645.4	3601.5	3566.5	3538.0	3520.4
17.5°	3842.6	3840.5	3820.7	3781.3	3741.8	3700.2	3660.7	3614.7	3570.8	3529.2	3502.9
20°	3893.1	3871.1	3836.1	3794.4	3752.8	3717.7	3687.0	3643.2	3597.1	3540.1	3500.7
22.5°	3961.0	3921.6	3871.1	3827.3	3787.8	3755.0	3719.9	3682.6	3634.4	3570.8	3516.0
25°	4057.5	3989.5	3932.5	3888.7	3853.6	3816.3	3776.9	3728.7	3680.4	3614.7	3548.9
27.5°	4204.3	4103.5	4031.2	3991.7	3958.8	3908.4	3858.0	3801.0	3739.6	3671.7	3597.1
30°	4381.9	4261.3	4178.0	4143.0	4103.5	4046.5	3991.7	3912.8	3827.3	3746.2	3654.1
32.5°	4590.1	4467.4	4384.1	4357.8	4294.2	4228.4	4151.7	4046.5	3934.7	3814.2	3704.5
35°	4905.8	4750.2	4673.4	4612.1	4524.4	4445.5	4316.1	4178.0	4018.0	3858.0	3722.1
37.5°	5230.2	5072.4	4993.5	4908.0	4794.0	4649.3	4476.1	4278.9	4066.2	3869.0	3702.4
40°	5664.2	5493.3	5392.4	5260.9	5076.8	4851.0	4594.5	4324.9	4066.2	3820.7	3619.1
42.5°	6170.6	6012.8	5857.1	5640.1	5344.2	5015.4	4655.9	4309.6	3996.1	3713.3	3500.7
45°	6872.0	6602.4	6354.7	6006.2	5574.4	5111.8	4662.5	4237.2	3875.5	3562.1	3325.3
47.5°	7661.2	7312.6	6874.2	6328.4	5738.8	5149.1	4598.9	4101.3	3684.8	3345.1	3086.4
50°	8570.9	8036.0	7363.1	6584.9	5822.1	5098.7	4447.7	3873.3	3421.8	3031.6	2755.4
52.5°	9612.1	8796.7	7805.9	6766.8	5808.9	4945.2	4197.8	3573.0	3068.9	2654.6	2382.7
55°	10767.3	9625.3	8228.9	6883.0	5690.5	4647.1	3805.4	3150.0	2630.4	2222.7	1983.8
57.5°	12803.7	11078.6	9035.6	7038.6	5442.8	4195.6	3307.8	2615.1	2146.0	1799.7	1571.7
60°	16587.2	13619.1	10563.4	7404.7	5070.2	3630.0	2680.9	2051.8	1659.4	1407.3	1238.5
62.5°	18928.3	15407.9	11308.7	7352.1	4465.2	2856.2	1990.4	1521.3	1212.2	1045.6	940.4
65°	18373.7	14706.4	10399.0	6315.3	3474.4	2025.4	1317.4	995.2	833.0	747.5	697.1
66°	17619.6	13921.7	9629.6	5655.5	3027.2	1692.3	1087.3	835.2	716.8	653.2	626.9
67.5°	16039.2	12488.1	8305.6	4528.8	2268.8	1260.4	802.3	655.4	583.1	550.2	532.7
70°	13424.1	10061.5	5874.7	2674.3	1229.7	683.9	512.9	455.9	438.4	427.4	420.9
72.5°	10379.3	7284.2	3432.7	1315.2	620.3	442.8	390.2	366.1	359.5	359.5	361.7
75°	6538.9	4186.8	1536.6	633.5	420.9	357.3	333.2	322.2	324.4	326.6	324.4
77.5°	2172.3	1444.6	640.1	449.4	366.1	324.4	304.7	300.3	304.7	306.9	306.9
80°	624.7	545.8	462.5	396.8	335.4	302.5	285.0	282.8	293.7	295.9	291.5
82.5°	480.1	449.4	418.7	383.6	322.2	285.0	278.4	280.6	287.2	282.8	263.0
85°	440.6	436.2	313.5	311.3	280.6	271.8	265.2	267.4	260.9	236.7	214.8
87.5°	247.7	230.2	177.6	179.7	208.2	214.8	177.6	188.5	175.4	153.4	140.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159619

CATALOG NUMBER: VST-E12-LED-E-U-T3-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3616.9	3616.9	3616.9	3616.9	3616.9
2.5°	3651.9	3649.7	3649.7	3656.3	3647.6
5°	3693.6	3691.4	3691.4	3698.0	3691.4
7.5°	3673.9	3667.3	3662.9	3660.7	3660.7
10°	3608.1	3601.5	3588.4	3584.0	3579.6
12.5°	3540.1	3533.6	3518.2	3518.2	3513.8
15°	3498.5	3489.7	3478.8	3472.2	3467.8
17.5°	3476.6	3463.4	3450.3	3443.7	3439.3
20°	3467.8	3450.3	3434.9	3424.0	3424.0
22.5°	3470.0	3448.1	3430.5	3417.4	3413.0
25°	3491.9	3459.0	3437.1	3424.0	3419.6
27.5°	3522.6	3483.2	3454.7	3437.1	3430.5
30°	3564.3	3509.5	3470.0	3448.1	3439.3
32.5°	3592.8	3516.0	3465.6	3434.9	3424.0
35°	3590.6	3491.9	3430.5	3391.1	3377.9
37.5°	3551.1	3434.9	3353.8	3305.6	3283.7
40°	3463.4	3329.7	3244.2	3198.2	3171.9
42.5°	3336.3	3191.6	3114.9	3064.5	3036.0
45°	3136.8	2994.3	2900.1	2860.6	2823.3
47.5°	2860.6	2715.9	2634.8	2577.8	2553.7
50°	2536.2	2391.5	2306.0	2260.0	2238.1
52.5°	2181.1	2043.0	1981.6	1937.8	1907.1
55°	1812.8	1685.7	1659.4	1611.2	1582.7
57.5°	1466.5	1391.9	1367.8	1319.6	1295.5
60°	1146.4	1122.3	1096.0	1065.3	1052.2
62.5°	887.8	865.9	859.3	839.6	837.4
65°	677.3	679.5	675.1	670.8	666.4
66°	616.0	613.8	616.0	611.6	609.4
67.5°	523.9	532.7	539.2	537.0	537.0
70°	425.3	431.8	440.6	438.4	438.4
72.5°	363.9	374.8	379.2	377.0	377.0
75°	328.8	339.8	339.8	335.4	333.2
77.5°	306.9	311.3	306.9	302.5	298.1
80°	285.0	280.6	274.0	267.4	263.0
82.5°	247.7	236.7	230.2	219.2	219.2
85°	199.5	190.7	175.4	164.4	153.4
87.5°	129.3	124.9	114.0	85.5	68.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)